

CLAIMS

What is claimed is:

1. A display system comprising:
a frame wearable on the head of a user; and
5 an imaging system coupled to the frame, the imaging system presenting a viewable image to the user at a view angle relative to the user's eye level.
2. The display system of Claim 1 wherein the imaging system is rotatable to adjust the view angle.
- 10 3. The display system of Claim 2 wherein the imaging system includes a display pod.
4. The display system of Claim 1 wherein the imaging system includes a mirror-lens optical system.
- 15 5. The display system of Claim 1 wherein the imaging system includes an optical relay.
6. The display system of Claim 1 wherein the frame is essentially transparent within the user's field of view.
7. The display system of Claim 1 wherein the frame is shaped to facilitate peripheral vision of the user.
- 20 8. The display system of Claim 1 wherein the imaging system includes a free-form prism.

9. The display system of Claim 8 wherein the prism is vertically aligned relative to the user.
10. The display system of Claim 8 wherein the prism is horizontally aligned relative to the user.
- 5 11. The display system of Claim 1 wherein the imaging system is mechanically isolated from the frame.
12. The display system of Claim 1 wherein the viewing angle is from below the user's eye level.
13. The display system of Claim 1 wherein the imaging system includes an aspheric lens folded optical system..
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14. The display system of Claim 13 wherein the optical system has a field of view of at least about 20°.
15. A method for use of a display system by a user, the method comprising:
wearing a frame on the head; and
15 viewing, at a view angle relative to the eye level, a presented viewable image on an imaging system coupled to the frame.
16. The method of Claim 15 further comprising rotating the frame to adjust the view angle.
17. The method of Claim 15 wherein the imaging system includes a display pod.

18. The method of Claim 15 wherein the imaging system includes a mirror-lens optical system.
19. The method of Claim 15 wherein the imaging system includes an optical relay.
20. The method of Claim 15 wherein the frame is essentially transparent within the user's field of view.
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21. The method of Claim 15 wherein the frame is shaped to facilitate peripheral vision of the user.
22. The method of Claim 15 wherein the imaging system includes a free-form prism.
23. The display system of Claim 22 wherein the prism is vertically aligned relative to the user.
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24. The method of Claim 22 wherein the prism is horizontally aligned relative to the user.
25. The display system of Claim 15 wherein the imaging system is mechanically isolated from the frame.
- 15 26. The display system of Claim 15 wherein the viewing angle is from below the user's eye level.
27. The display system of Claim 15 wherein the imaging system includes an aspheric lens folded optical system..

28. The display system of Claim 15 wherein the optical system has a field of view of at least about 20°.
29. A method of making a display system, comprising:
 - fabricating a frame wearable on the head of a user;
 - 5 fabricating an imaging system for presenting an image; and
 - coupling the imaging system to the frame so that the presented image is viewable at a view angle relative to the user's eye level when worn.
30. The method of Claim 29 wherein the imaging system is rotatable to adjust the view angle.
- 10 31. The display system of Claim 29 wherein the imaging system includes a display pod.
32. The display system of Claim 29 wherein the imaging system includes a mirror-lens optical system.
33. The display system of Claim 29 wherein the frame is essentially transparent
15 within the user's field of view.
34. The display system of Claim 29 wherein the frame is shaped to facilitate peripheral vision of the user.
35. The display system of Claim 29 wherein the imaging system includes a free-form prism.